



Do this. For turned vertical surfaces, always brush on the finish in horizontal strokes.



Don't do this. Brushing a finish onto a turned vertical surface using up-and-down strokes will invariably lead to messy drips.

BY JEFF JEWITT

Several years ago I was sitting in the audience while a noted finisher went through the paces of his class, demonstrating brushing, French polishing and so forth. The woman sitting next to me, Karen, was fidgety. At one point she whispered, "This isn't finishing!" Afterward, we strolled up to the instructor to shake hands and exchange pleasantries. Karen was less than enthusiastic. She came right out with what was on her mind. "You know, you people make me crazy. I came here to learn something about finishing, and all you showed me was how to finish flat sample pieces. That's easy. What about finishing real furniture?"

I never forgot what Karen said—she was right—not all surfaces are flat. If they were, finishing would be a piece of cake. There are two sides to doors, insides of cabinets with myriad right angles, vertical surfaces, molded edges, carvings and intricate shapes like those on chairs, spindles and turned legs.

There are several ways to put a finish on a complicated surface. Spraying on a finish addresses some of the challenges, but it's not the answer for all furniture. I believe that a sprayed finish simply doesn't look right on some pieces. One strategy is to finish all of the parts of your project before you glue it up, which renders a cleaner appearance and speeds up the finishing process. The concept of prefinishing is simple—protect areas that will be glued later so that finishing material doesn't interfere with the glue. Unfortunately, taking this approach is not always possible with more complicated furniture that you need

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to scrape and sand after assembly. And if you are refinishing furniture, you usually don't have the option of taking it apart. Another strategy is to adjust your approach to the surface of the finish, which involves some application techniques that you may not be familiar with—cross-brushing, padding and what I call the "brush-and-feather" technique for lacquer or shellac.

Cross-brush vertical surfaces

I cross-brush varnish using a good-quality bristle brush (see the photos at right). I apply the varnish horizontally, then tip it off vertically, using only the very end of the bristles to smooth out the finish. This sequence avoids drips and prevents sagging in the finish as it dries.

To use this method, dip the brush only about a quarter to a third of the way into the varnish. Start at the bottom of a panel and brush the varnish horizontally in both directions. Continue this pattern, overlapping each stroke by about $\frac{1}{2}$ in., and work all the way to the top. Then tip off the whole panel vertically, periodically wiping excess finish off the brush with a clean rag. You want to avoid thinning the varnish when cross-brushing because thinned varnish is more likely to drip and sag.

When cross-brushing a complicated vertical surface, like that of a frame-and-panel construction, start at the deepest areas, then work toward the higher ones. Finish the raised field of the panel last. Wipe any drips lightly with a dry brush. Also, excess varnish pooled in comers and moldings can be wicked up with a dry brush,

Pad onto round surfaces

Nothing works better on turned surfaces, such as those on the maple headboard be-



Lay it on left to right. Cross-brushing, which works best with varnish, starts with a horizontal application of the finish.



Tip it off top to bottom. Use only the very tip of the bristles of a good-quality varnish brush to even out a cross-brushed finish and to keep it from sagging.

low right, than a padding technique. In cases such as this, padding will give you a better finish than spraying. You can apply either varnish or shellac with a pad. I usually use shellac because it dries faster, when applied in thin coats. Because it dries so quickly, a padded shellac finish can be completed easily in one day and rubbed out and waxed the next.

Use a pad that is soft and absorbent and as lint-free as possible. I use a product called padding cloth, or trace cloth, but old cotton T-shirt cloth also works well. Make a pad with a flat bottom by wadding up some cloth so that it fits easily in your hand. The bottom should have no seams or

wrinkles. Then squirt about an ounce of a 2-lb. cut of shellac onto the bottom of the pad (see the top left photo on p. 42). I use a squeeze-type bottle with a nozzle to dispense the shellac.

Wipe the shellac on the surface of the wood in light, smooth passes (see the top right photo on p. 42). On round, turned areas you can wrap the cloth around the wood, starting at the top of the workpiece and working your way down. When the surface gets tacky and the pad starts to stick, stop and let the surface dry. After about an hour, lightly sand the surface with 320-grit sandpaper and repeat the sequence. When the final coat is dry, leave it

When you're doing more than tabletops, adjust your technique to the surface at hand





A pad for shellac. A wad of soft, absorbent, lint-free cloth is all you need to make a pad for applying shellac. You can use a plastic squeeze bottle to wet the pad or you can dip it into the finish. Wipe on the shellac in light, smooth passes.

as is or rub it with 0000 steel wool to remove the gloss.

Brush and feather fast-drying finishes

Shellac and lacquer require a different brushing technique than varnish does. Varnish flows onto a surface and is then smoothed out in long strokes with the tip of the brush before it sets. For fast-drying

lacquer and shellac, I prefer to brush on thin, light coats of finish quickly in short strokes, then feather each layer out before it dries. This technique works well for vertical surfaces and complicated furniture, like chairs (see the right photo, below).

With shellac, start with a 2-lb. cut. If you have problems, thin that a bit more to a 1½-lb. cut or so. Straight out of the can,

most brushing lacquers are too thick for this technique and must be diluted with an equal part of lacquer thinner. Use a small brush with fine, soft bristles. Several manufacturers make brushes with Taklon bristles, a synthetic fiber resembling the finest sable-hair artist's brushes. Either china bristles or a synthetic nylon brush will also work fine. Get the widest brush you can: I use a 1½-in. Winsor & Newton No. 580.

Dip just the tip of the brush into the finish and press off the excess against an edge of the container. Bring the brush to the surface of the wood and start brushing lightly and quickly, flowing the wet finish off the brush. Work until the brush dries out, then replenish with more finish. When you start a new stroke, you'll have a puddle of thicker finish. Smooth that immediately into the rest of the finish with a flicking or whisking motion. Work the entire surface quickly with thin coats of finish. Because lacquer and shellac dry quickly, and because the coats are thin, you can recoat an area almost immediately.

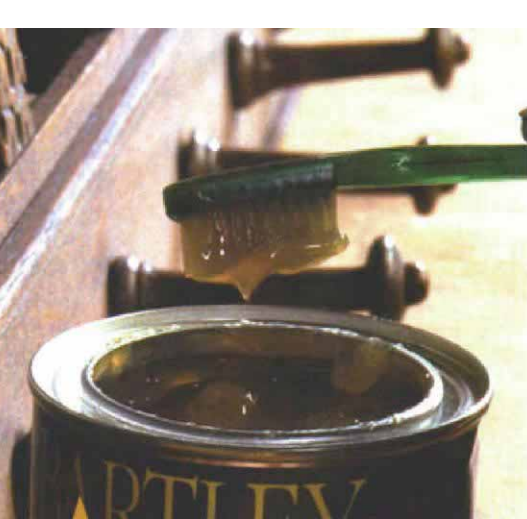
When the brush starts to stick, stop and let the surface dry for at least an hour. Then, using 320-grit stearated paper, lightly sand the surface. Go easy on the edges



Storage trick prolongs brush life. Squeeze excess shellac from the bristles and let the remaining finish harden on the bristles. A dip into alcohol will make the bristles soft and supple again.

Short and simple. Short, choppy strokes are required for a brush-and-feather technique, which works best with fast-drying finishes such as shellac and lacquer.





A toothbrush for tight crevices. For tight spaces and intricately molded shapes, apply a gel varnish with a soft toothbrush, then brush off the excess finish with a large, dry bristle brush.

because the finish film will be thin. Rub the surface with 000 steel wool or maroon synthetic steel wool. Remove the sanding dust with a tack rag. Repeat that same sequence, applying thin coats of finish. Extend the drying time to overnight after the second coat of finish has been applied. Six or seven applications will result in a durable, good-looking finish with great depth.

Round, vertical surfaces—I use a version of the brush-and-feather technique for some round, vertical surfaces, such as the tripod on p. 40. Using a brush for round legs and spindles is easy as long as you brush it round and round using a lightly loaded brush. Horizontal strokes are essential. If you brush turned shapes using up-and-down strokes, I guarantee you'll get a drip (see the inset photo on p. 40).

Insides of cabinets and drawers—If you must put a finish on the inside of cabinets and drawers, use only shellac or lacquer, if possible, because oil and oil-based varnishes take a long time to cure thoroughly. Also, in an enclosed space, the solvent smell will linger for a long time, being absorbed into stored clothing and linens. For these tight spaces with many corners, apply several coats of lacquer or shellac using the brush-and-feather technique (with a

Taklon brush), then rub out the surface with 0000 steel wool and wax.

Brush carvings and moldings

To finish intricate carvings and moldings, apply gel varnish with a soft toothbrush (see the photos above). Scoop out the varnish with the brush and work it into the crevices. Then brush the excess off with a dry, soft natural bristle brush. This method yields a satin sheen that also preserves the details of carved or molded wood.

Finishing two sides at the same time

With doors, drop leaves and lids, it is necessary to put a finish on both sides relatively quickly. You can finish one side at a

time, but in hot or humid weather, that could cause warping problems. To coat both sides at once, you can apply a finish with the doors installed on the cabinet. Or you can use a nail board—a piece of plywood with nails, brads or drywall screws driven through one side (see the photo below). Finish the back side first, then place that finished side down on the sharp points of the nails or screws to support it while you finish the other side. I prefer drywall screws to nails because their sharp points leave less of a dimple in the finish. □

Jeff Jewitt, a frequent contributor to Fine Woodworking, restores furniture and sells finishing supplies for a living.



Two ways to finish both sides at once.

The doors on this walnut sideboard illustrate two ways to finish both sides of a component: Either leave the door in place for finishing or take it off the cabinet and place it on a nail board for finishing.